

# REMEDIAL ACTION WORKPLAN

CASWELL, STRAUSS & COMPANY

Block 546-I, Lot 38-A  
1670 Oak Tree Road  
Edison, New Jersey

## Performed For:

Paul Kapoor  
Kaushalya, Inc  
25 Four Columns Drive  
Morganville, NJ 07751

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*Amended November 2012*

Submitted By:  
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## **1.0 Executive Summary**

Prior investigations at the former Caswell, Strauss & Co located at 1670 Oak Tree Road, Edison, New Jersey indicated that human health and the environment could be at risk if lead contaminated soil remains exposed in direct contact to human. This could be controlled by removing contaminated soil and implementing engineering control by capping the contaminated area.

### **1.1 Work Plan Overview**

This work plan describes the approach for implementing the next action for the site owner, Paul Kapoor. This phase will remove the contaminated soil and cap the area with concrete.

## **2.0 Introduction**

The site (Block 546-I, lot 38-A) is located at 1670 Oak Tree Road, and is owned by the Kaushalya Inc. As the owner of the property, Kaushalya Inc is submitting this remedial action work plan, and upon approval will proceed to carry out the proposed remedy to clean up the northern section of the property.

Geo-Enviro Consulting & Remediation (GE&R) will remove the upper 4 inches of lead contaminated soil along the northern boundary of the property and then capped with concrete.

All activities conducted pursuant to this work plan will be done in accordance with the New Jersey Department of Environmental Protection Technical Requirements for Site Remediation (TRSR), N.J.A.C. 7:26E.

## **3.0 Site Description**

### **3.1 Physical Location**

The site is located on the northern side of Oak Tree Road between Henry Street and Sugar Road. The surrounding area is comprised of a mixture of commercial and residential dwellings. The property is bordered at the northern and eastern side by Extra Space storage, a vacant property to the west and the 4-way road (Oak Tree Road) to the south. This busy local road is comprised of small strip malls and restaurants. There are no schools within 2000ft of the site; while the nearest park is Winter Street Park which is approximately 1¼-mile to the west, southwest.

### **3.2 Physical Setting**

#### *3.2.1 Geology*

The Edison corridor lies within the Piedmont Physiographic Province and is underlain by the late Triassic to early Jurassic Passaic Formation of the Newark Supergroup. The

Passaic Formation (*historically known as the Brunswick Formation*) occupies an upper unit of the Newark Supergroup rocks in the Triassic-Jurassic Newark Basin. The Passaic Formation is the thickest and the most aerially extensive unit in the Newark Basin. This formation consists of mostly red cyclical lacustrine clastics including mudstone, siltstone and shale, with minor fluvial sandstone.

### 3.2.1 *Passaic Formation Bedrock and Structural Geology*

The Passaic Formation is the youngest formational unit of the Newark Group, which consists of (oldest to youngest), the Stockton, the Lockatong and the Passaic Formations, respectively. The Passaic formation consists predominantly of reddish-brown feldspathic mudstone and micaceous siltstone, with some claystone and fine-grained sandstone. The reddish-color originates from reworked hematite, which comprises five to 10 percent of the unit. When exposed to weathering, the Passaic units disintegrate into blocky and nodular-shaped fragments and chips that flake along bedding planes. The shaley units ultimately disintegrate into a hard clay or saprolite.

The sedimentary units of the Passaic Formation generally dip about 5° to 15° to the northwest. Specifically, in the Rahway area to the northeast of the general area, the Passaic Formation unit strikes 50° northeast to southwest and dips 9°-12° to the northwest. The predominant system of fractures at that location strike about 45° northeast-southwest and are mostly vertical. A second less prominent system strikes 75° northeast-southwest and is also nearly vertical. Fractures parallel to the formation bedding are reportedly more continuous and extensive than the vertical fractures.

## 3.3 Summary of Prior Investigations and Remedial Action

In October and November of 2011 the New Jersey Department of Environmental Protection (NJDEP) collected soil samples on the property of former Caswell, Strauss & Co, a lead smelting facility that operated in the 1940s. Results from the soil sampling activity indicate that lead contamination may be present at properties adjacent to the site. In February of 2012 The Environmental Protection Agency (EPA) collected soils samples from homes within the immediate area of the contaminated property and discovered lead within the soil that exceeded the EPA residential screening level of 400 ppm.

## 4.0 Proposed Action

In order to address the elevated levels of lead in soil samples collected on the northern boundary of the property specifically in the areas between former soil samples SS015 and SS017 GE&R is proposing to excavate 4 inches of lead contaminated soil. The excavated area is approximately 4ft by 100ft. In addition since there was no soil delineation of former soil samples SS015 and SS017, GE&R proposed the removal and capping of the entire bare soil exposure on the northern side of the property within the legal property boundary to ensure that all exposed soil is capped. This remaining bare soil area is approximately 12ft by 22ft. Approximately 212 cubic feet (about 8cu.yd) of soil will be expected to be generated. A waste classification sample will be collected for the proper

soil disposal and a waste manifest generated as part of remedial action report. GE&R will collect three post excavation samples in the areas of former soil sample location SS015, SS016 and SS017 to determine the level of contamination that will be left on site prior to implementation of the engineering control. The excavated area will be back filled with 1 inch thickness of p-gravel and then capped with 3 inches of concrete, this will be finished maintaining the grade level of the existing curb. A limited remedial action report will be prepared post remedy implementation for the departments review, proposing no further action required in the immediate area.

#### **4.1 Risk Exposure and Pathways during Construction**

All safety measures will be taken to minimize the risk of creating migratory pathway during soil removal.

#### **4.2 Safety Plan**

A site specific health and safety plan will be prepared, reviewed and signed by all responsible personnel prior to site entry.

#### **4.3 Soil Removal and Treatment**

Contaminated soil will be removed from the site and treated off site by the disposal facility.

#### **4.4 Soil or Paved Cap**

A 3 inch concrete capping is planned as part of the remediation plan.

#### **4.5 Vapor Barrier**

No vapor barrier is planned for this phase of the remediation plan.

#### **4.6 Groundwater Pump and Treat**

No groundwater pump-and -treat is planned for this phase of the remediation plan.

#### **4.7 Future Actions**

No Future actions are planned for this area after this remedy has been put in place.

### **5.0 Permit and Approval Requirements**

No special permits are required prior to the pursuant of this work plan. Underground utilities will be marked on the site as a precaution for any shallow buried utilities. The approval to execute this work plan will be dependent on the department.

### **6.0 Health and Safety Program**

Activities at the site will be conducted in accordance with a health and safety program in compliance with applicable OSHA standards and implemented by a contractor qualified to oversee hazardous waste operations. In accordance with the OSHA hazardous waste standards operations (HAZWOPER) (29 CFR1910.120), a written site-specific Health and Safety Plan (to be sent under separate cover) will be prepared for the project.

Personnel with potential exposure to hazardous materials will be required to have OSHA 40-hour HAZWOPER training. Work involving potential exposure to hazardous substances will be performed under the supervision of a Site Health and Safety Coordinator with specific experience in HAZWOPER activities and possessing OSHA 8-hour health and safety supervisor certification.

### References

- Community Update may 2012, Site Investigation, Caswell Strauss & Co. Site, Edison, New Jersey. United States Environmental Protection Agency